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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,744	11/04/2003	Kuniaki Mamitsu	01-103-CON6	6398
23400	7590 08/09/2004		EXAMINER	
POSZ & BETHARDS, PLC			WILLIAMS, ALEXANDER O	
11250 ROGE SUITE 10	R BACON DRIVE		ART UNIT	PAPER NUMBER
RESTON, VA 20190			2826	

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/699,744	MAMITSU ET AL.			
Office Action Summary	Examiner	Art Unit			
	Alexander O Williams	2826			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
, ,	(10 057 TO EVENE - 110 NEV				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 25 M	av 2004				
·	action is non-final.				
3) Since this application is in condition for allowar		secution as to the merits is			
closed in accordance with the practice under E	•				
Disposition of Claims					
- 4)⊠ Claim(s) <u>66 and 67</u> is/are pending in the applic	ation				
4a) Of the above claim(s) is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>66 and 67</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) acce		Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	e-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☒ None of:					
1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents	s have been received in Applicati	on No			
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage			
application from the International Bureau	` '//				
* See the attached detailed Office action for a list	of the certified copies not receive	d.			
AMa-sharana(a)					
Attachment(s)  1) X Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/4/03</u> .	5) Notice of Informal P 6) Other:	atent Application (PTO-152)			

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Serial Number: 10/699744 Attorney's Docket #: 01-103-CON6

Filing Date: 11/4/2003; claimed foreign priority to 11/24/99; 3/24/00; 3/30/00;

10/4/00

Applicant: Mamitsu et al.

Examiner: Alexander Williams

Applicant's election of the Species of figure 10 (claims 66 and 67), filed 5/25/04, has been acknowledged.

Claims 1-65 have been canceled.

Applicant's Pre-Amendment filed 11/4/03 has been acknowledged.

Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Japan on 11/24/99; 3/24/00; 3/30/00; and 10/4/00. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

The disclosure is objected to because of the following informalities: The related patent application dated should be updated.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 66 and 67 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lee (U.S. Patent # 4,620,215).

66. Lee (figures 1 to 10) specifically figures 3 and 8 show a semiconductor device comprising: a semiconductor chip **70** comprising a bump **73** disposed on

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the semiconductor chip for being bonded to a control terminal **85,62**; first and second radiation members **80,63** thermally and electrically connected to the semiconductor chip interposed therebetween, and having a radiation surface for radiating heat from the semiconductor chip; and first **83,84** and second **74,77** bonding members respectively interposed between the first radiation member and the semiconductor chip and between the semiconductor chip and the second radiation member, wherein: the first and second radiation members are made of a metallic material that is superior to tungsten and molybdenum in at least one of an electrical conductivity and a thermal conductivity.

67. The semiconductor device of claim 66, Lee show wherein no wire is required to be bonded from the control terminal to the semiconductor chip for providing electrical communication with an external device.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/700,701,758,688,689,759,673,676,675,712,713,717, 720,718	8/4/04
Other Documentation: foreign patents and literature in 257/700,701,758,688,689,759,673,676,675,712,713,717, 720,718	8/4/04
Electronic data base(s): U.S. Patents EAST	8/4/04

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander O Williams whose telephone number is (571) 272 1924. The examiner can normally be reached on M-F 6:30-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272 1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AOW 8/6/04

> Primary Patent Examiner Alexander O. Williams